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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

DONAGHUE, LARRY D

ART UNIT PAPER NUMBER

2154

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/477,880

Applicant(s)

BLAHUT ET AL.

Examiner

Larry D. Donaghue

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,7-10,12-25 and 27-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-10 and 22-25 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,12-21 and 27-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. Claims 1-2,4-5, 7-10, 12-25 and 27-32 are presented for examination.
2. Applicant's arguments, see pages 12-17, filed 09/14/05, with respect to the rejection(s) of claim(s) 1,2,4,5,12-21 and 27-32 under 35 U.S.C. 103 in view of Jones et al. (5,903,558) and Atarashi et al. (6,173,312) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hrastar et al. (6,286,058).

3. **Claims 7-10 and 22-25 are allowed.**

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 4, 12-19,20, and 27-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Hrastar et al. (6,286,058).

6. As to claim 1, Hrastar et al. taught the specifying routing information for an endpoint, wherein the routing information specifies primary and alternative Internet Protocol (IP) addresses (901); and communicating data to the endpoint using the specified primary IP address except during periods of service interruption in which one of the alternative IP addresses are used Col. 14, lines 11-62).

As to claim 4, Hrastar et al. taught storing a routing table comprising an first Internet Protocol (IP) address associated with routing data to an endpoint via the primary communications channel (132) and a second IP address (901) associated with routing data to the endpoint over a secondary communications channel (131); and routing data to the endpoint as a function of the routing table (901) such that during periods of service interruption on the primary communications channel data is routed to the endpoint via the secondary communications channel, whereas data is routed to the endpoint via the primary communications channel otherwise (col. 14, lines 11-62).

As to claim 12, Hrastar et al. taught an apparatus comprising: a device (101) for (a) specifying routing information for an endpoint, wherein the routing information specifies primary and alternative Internet Protocol (IP)

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addresses (901) , and (b) communicating data to the endpoint using the specified primary IP address except during periods of service interruption in which one of the alternative IP addresses are used (col. 14, lines 11-62).

As to claim 14, Hrastar et al. taught an apparatus (122) for use in providing Internet service to an endpoint, the apparatus comprising: a device (101) for routing data to the endpoint as a function of a routing table (901) stored therein such that during periods of service interruption on a primary communications channel (132) associated with a primary IP address data (901) is routed to the endpoint via a secondary communications channel (131) associated with a secondary IP address (901), whereas data is routed to the endpoint via the primary communications channel otherwise (col. 14, lines 11-62)

As to claim 16, Hrastar et al. taught a cable head-end router (101) for providing Internet Protocol (IP) packets intended for subsequent conveyance over a primary channel (132); and a cable modem data termination system (122) responsive to the provided IP packets for routing the IP packets to an endpoint as a function of a routing table (901) stored therein such that during periods of service interruption on the primary communications channel the IP packets are routed to the endpoint via a secondary communications channel(131) associated with a secondary IP address, whereas the IP packets are routed to the endpoint via the primary communications channel associated with a primary IP address otherwise (col. 14, lines 11-62).

As to claim 17, Hrastar et al. taught a cable head-end router (122) for providing Internet Protocol (IP) packets that include a destination field having a value associated with a first IP address (901) ; and a cable modem data termination system (122) responsive to the provided IP packets for communicating the IP packets to the endpoint using the first IP address except during periods of service interruption in which an alternative IP address(901) is used (col. 14, lines 11-61).

As to claim 18, Hrastar et al. taught specifying routing information for an endpoint, wherein the routing information specifies primary and alternative Internet Protocol (IP) addresses (901); and communicating data to the endpoint using the specified primary IP address (901) over a first cable-based communications channel (132) except during periods of service interruption (col. 14, lines 11-62) in which one of the alternative IP addresses are used for communicating over a second non-cable-based communications channel (131).

As to claim 20, . Hrastar et al. taught storing a routing table (901) comprising an first-Internet Protocol (IP) address associated with routing data to an endpoint via the primary communications channel (132) and a second IP address (901) associated with routing data to the endpoint over a secondary communications channel (131); and routing data to the endpoint as a function of the routing table such that during periods of service interruption on the primary communications channel data is routed to the endpoint via the secondary communications channel, whereas

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data is routed to the endpoint via the primary communications channel otherwise and wherein the primary communications channel and the secondary communications channel are supported by physically different communications mediums (col. 14, lines 11-62).

As to claim 27, Hrastar et al. taught a device for (a) specifying routing information for an endpoint, wherein the routing information specifies primary and alternative Internet Protocol (IP) addresses (901), and (b) communicating data to the endpoint using the specified primary IP address over a first cable-based channel (132) except during periods of service interruption in which one of the alternative IP addresses are used for communicating data over a second non-cable-based communications channel (131). See Col. 14, lines 11-43 and lines 54-62.

As to claim 29, Hrastar et al. taught a device (101) for routing data to the endpoint as a function of a routing table (901) stored therein such that during periods of service interruption on a primary communications channel (132) associated with a primary IP address data is routed to the endpoint via a secondary communications channel (131) associated with a secondary IP address (901), whereas data is routed to the endpoint via the primary communications channel otherwise and wherein the primary communications channel is physically different from the secondary communications channel (col. 14, lines 11-61).

As to claim 31, Hrastar et al. taught a cable head-end router (101) for providing Internet Protocol (IP) packets intended for subsequent conveyance over a primary cable channel (132); and a cable modem data termination system (122) responsive to the provided IP packets for routing the IP packets to an endpoint as a function of a routing table (901) stored therein such that during periods of service interruption on the primary cable channel the IP packets are routed to the endpoint via a secondary non-cable communications channel (131) associated with a secondary IP address (901), whereas the IP packets are routed to the endpoint via the primary cable channel associated with a primary IP address otherwise (col. 14, lines 11-62).

As to claim 32, Hrastar et al. taught a cable head-end router (101) for providing Internet Protocol (IP) packets that include a destination field having a value associated with a first IP address (901); and a cable mode data termination system (122) responsive to the provided IP packets for communicating the IP packets to the endpoint over a cable-based communications channel (132) using the first IP address except during periods of service interruption in which an alternative IP address (901) is used for communicating the IP packets to the endpoint over a non-cable-based communications channel (131). See Col. 14, lines 11-43 and lines 54-62.

As to claims 13, 15, 28 and 30. Hrastar et al. taught the device is a part of a cable television network, CATV (101, 122).

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7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2, 5, 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hrastar et al. (6,286,058) as applied to claims 1,4,18 and 20 above, and further in view of Nordman (6,061,346).

As to claims 2, 5, 19 and 21, Hrastar et al. taught detecting the service interruption (Col. 14, lines 54-62).

Hrastar et al. did not expressly teach establishing an IP tunnel to the endpoint using one of the alternative IP addresses; and forwarding the data via the IP tunnel to the endpoint.

Nordman taught the use of tunneling to establish an IP connection (Col. 8, line 9-24). It would have been obvious to one of ordinary skill in the data processing art at the time of the invention to combine these two references as establishing a tunnel to improve the security of the connection (Col. 8, lines 9-24).

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hrastar et al.	6,301,223
Hrastar et al.	6,992,412
Hrastar et al.	6,529,517
Takamatsu et al.	5,119,488
Doviak et al.	6,826,405
Bremer et al.	6,553,002

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Larry D. Donaghue whose telephone number is 571-272-3962. The examiner can normally be reached on M-F 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


LARRY D. DONAGHUE
PRIMARY EXAMINER

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).